

Analysis of the effect of economic growth toward the center of the overflow area and hinterland in determining nodal centre of new growth on the area of Mamminasata in South Sulawesi

Zainuddin Rahman

*Faculty of Economic of Universitas Muslim Indonesia Makassar
 Email: zainrahman@yahoo.co.id*

ARTICLE INFO

Article history:

Received, August 21, 2017

Revised, September 10, 2017

Accepted, November 29 2017

Keywords:

development

Hinterland

Regional Nodal

Spillover effect

ABSTRACT

This research conducted in Mamminasata District, South Sulawesi Province. This study examines the Economic Effects of the overflow "Pertuhan Against Nodal regions and Hinterland. The purpose of this research is: (1) to review the impact of the effects of development and economic growth of the overflow against Nodal regions and Hinterland in a region (Mamminasata), (2) to examine and explain the impact of the overflow against labor, enterprise development, (3) to examine and explain the strategy and Policy Development areas in South Sulawesi.

The research method used was diskriptif by using model ratio analysis. The population was throughout the County and the city in South Sulawesi while the sample is selected by purposive, i.e., Mamminasata Area that includes the city of Makassar, Maros Regency Gowa (Minasa), Takalar Regency. The data of the secondary data is yangdiguunakan by taking data for the year 2011-2013.

The research results showed that the distance of the Centre of the region with growth has an impact on the magnitude of the effect of abundance that can be received by each region, where the overflow effect of Gowa received a big growth 8.689810974, Maros 4.05005707, Takalar Regency. 2.344019694. While the new growth Centre in the area of the District Mamminasata Takalar. A development strategy that can do is how to build synergy with neighboring daerah so economic abundance can flow into the area that synergizes

Copyright © 2017 Indonesia Prime.
 All rights reserved

I. Introduction

Economic growth center is one of the alternatives to stir and spur development to increase people's income. Economic growth, while directed at areas which have potential and facilities area will accelerate the occurrence of economic progress because indirectly the advancement of the region will make the community looking for a worthier life in its territory.

According to Tarigan, the center of growth (growth pole) can be interpreted in two ways, i.e., functionally and geographically. Functionally, the Center for growth concentration location is a group effort because of the nature of their relationship has elements of kedina-misan so able to stimulate the economic life, either inward or outward. When seen geographically, the growth center is a site that has many facilities and convenience so that it

becomes the center of attraction (pole of attraction) who because various businesses interested in located there and happy society utilize existing facilities at that location. The central criteria of growth, i.e., as a fast-growing area, has a flagship sector and has economic interaction with the region.

The creation of the center of economic growth can start from some sectors that are dynamic and able to provide a high ratio of output on a specific area, which can provide a broad impact (spread effect) and double impact (multiplier effect) on the sector other and the wider region. Market forces will ensure the equilibrium (balance) in the economic and spatial distribution of the trickledown effect or process center down by itself will happen when welfare in urban areas reached and started at a high level such as urban areas into the lower areas such as rural and hinterland region via several mechanisms, namely the urban hierarchy and big companies. Implementation of creation of growth must be followed by the trickle-down effect (the impact of the hatching downwards) and spread effect (the impact of dissemination) through harmonious activity between growth and resource base in rural areas so that activities of center of growth have an impact on the surrounding area which will also be able to grow.

II. Theoretical review

A. Theoretical Studies

a. Understanding Strategy

Drafting the strategy is basically to create action or response against external changes that occur that seen can bring harm to organizations such as; changes in technology, changes in politics, economy, culture, Government policy. Such external changes can anticipate improvements to the internal conditions of an organization.

Bintoro and Mustopadidjaja (1988) in Riyadi (2003) revealed that the strategy is "a whole step (policies) with the calculation that is

sure to achieve a goal or to resolve an issue. In a statement more emphatically again with regards to technique, that strategy is a calculation about the series of policies and measures implementation thoroughly, including methods and techniques.

Nurkholis (2001), that strategy is, in fact, a common action plan, long-term (oriented to the future), and its coverage area. Therefore, strategies usually formulated in the phrase which means the content is very common and does not refer to specific actions or details. Nevertheless, strategic planning does not mean that "detailed and specific actions" that usually encapsulated in a work program should not compile. Othe rwise, the work programmers should also be planned in the strategic planning process and should even be formulated or defined as a measure of its performance.

Based on this definition, strategy becomes a fundamental framework as the site of an organization will be able to declare a vital continuation, while at the same time he would have the power to adjust itself against the ever-changing environment. On the basis that it is a concise strategy can define as art using the skills and resources of an organization to achieve goals through an effective relationship with the environment in the most favorable conditions.

b. The theory and concepts of development and Growth

The difference in the conditions of the region implies that the pattern of development that applied in each region will be different as well. Munir (2002), impersonation of raw against the pattern of the policy ever applied and managed on a region, not necessarily give the same benefits for other areas. Each regional development has the primary goal to increase the number and types of job opportunities for the people of the region. To achieve that goal, the Government and the society should

jointly take the initiative-equal regional development. Therefore, the local government with the participation of the society by utilizing existing resources must be able to estimate the potential resources required to design and build the economy of the region (Syafrijal, 2008). Regional development (regional) is a function of the potential natural resources, labor and human resources, capital investment, infrastructure development, transport and communications, industry composition, technology, economic situation and trade between the territory, the ability of the funding and financing of regional development, entrepreneurship (entrepreneurship), regional and institutional environment development extensively (Adisamita, 2008). Regional development can be seen from various establishments. First, regarding sectoral development. The achievement of national development objectives is carried out through different sectoral development activities undertaken in the area. Sectoral development adapted to the conditions and potential of the region. Second, regarding territorial development which includes urban and rural as the center of socio-economic activities and locations of the region. Third, a regional development is seen regarding governance. Regional development goals can only be achieved if local governance can run well. Therefore, regional development is an effort to develop and strengthen local governance to increasingly autonomous region steady a real, dynamic, harmonious and responsible (Sjafrizal, 2008). The regional development programmers' to be implemented an area should not conflict with development programs that have been designated by the Central Government. So, in fact, the construction carried out by each area is complementary development planning that is kept by the Central Government that is creating a program to distribute projects to various regions with the purpose of providing an optimal contribution to Government efforts to build. Two conditions affect

regional development planning process (Kuncoro, 2004):

- a. The pressure comes from the environment within the country and outside the country that affects the needs of the area in the development process of its economy.
- b. the fact that the economy of the region in a country affected by each sector differently.

The region's economic growth is the increase of the economic variables of a spatial subsystem of an area and can also be interpreted as an increase in the prosperity of a region. Economic growth in the region analyses an area as an open economic system that relates to other territories through the outflow of production factors and the exchange of commodities.

Regional economic growth is the increase in people's income that occurs in an area, i.e., increase the whole value added (added value) that occurred in the area (Tarigan, 2005). That attention to the growing area of economic growth in the era of regional autonomy. This is because in the autonomous region each region competes for increases economic growth area, to increase the prosperity of the people. Therefore, the discussion about the structure and determinants of the growth area will be very important for the local governments in determining the efforts that can be done to encourage economic growth in the regions (Sjafrizal, 2008).

The calculation of the income of the area initially made on the price effect, but to be able to see from time to time the next must be declared with the real value, which is expressed in constant value. The income of the area describes the retribution for the factors of production that are operating in the area (land, capital, labour, and technology), which means that roughly describes the prosperity of the area. The prosperity of a region other than determined by the

magnitude of the value added created in the area by how big the occurrence of transfer payment, the income that flows to the outside area or got the flow from outside the region (Septa, 2007).

c. Growth Pole Theory (*Growth Pole*)

Growth Pole theory first pioneered by Francois Perroux French Regional Economist, in 1955. This thought occurred to refute the views of economists at the time, such as Casel (1927) and Schumpeter (1951) who theorized that the transfer of the growth between the regions generally went smoothly, so that the development of the factors of production, including population, labor, capital, and production is not always proportional intertemporal. Perroux says that real growth is not growing (growth does not slow growth). The fact that Deus Caritas Est after doing research on industrial vehicles (motor industry) tend to concentrate in certain areas (the cluster of industries) driven by the existence of agglomeration advantages (agglomeration economies) the agglomeration advantages, further impacting on the efficiency of the positive impact of economic growth for development (Sjafrizal, 2008:126-127).

The theory is also supported by Hirschman (1958) that identify the presence of certain areas that are growing very fast, and there are unisex areas that grow very slowly. That because in the process of development, there is the effect of seepage (trickling down effects) and the effects of the concentration (polarization effect) are different between a region with other regions.

This theory was later developed by many economists to analyze the cantonal economic issues such as regional development acceleration lag (distressed region), to overcome inequalities between regions, agglomeration economies, mapping investments and others.

Richardson (1978:164-165) provides the definition of the urban center are: a collection in which occurs a dynamically and strong growth caused by a group of industry through the intercession of the input – output with excellent technology creating a high innovation, high

levels of income elasticity, elasticity of the high level of request against the product, creating a broad market, plenty of multiplier and effect in the segment of the economy.

From this definition it can be specified that there are four main characteristics of a center of growth, namely: (1) the existence of a cluster of economic activities are concentrated in an area; (2) the concentration of economic activities capable of encouraging economic growth dynamically in the economy; (3) there are input and output linkages are strong among fellow economic activities at the Centre; (4) in groups of economic activity is a parent move the industry development of economic activities in the Centre.

d. Effect of spatial abundance (*spatial spillover effect*)

The effect of the overflow can consist of the two categories, spread or trickling down and backwash or polarization. In the theme of the overflow effect, meaningful growth poles effect the growth that occurs in the polar regions the growth towards the surrounding area (hinterland). The impact can be positive (favorable effect) and can be negative (unfavorable effects). The impact can define in the context of its influence on per-capita income and economic structure (Richardson, 1978:167-169).

(Barcelona, 2009), in the event of spillovers, then the social rate of return against the investment exceeds private interest rate Returns, justifying government intervention. Regarding normative, identification. From locally limited spillovers can support in identifying specific areas (metropolitan area, local District) to invest (Girma and Wakelin, 2000). Fischer et al. (2002) the effect of technology overflow of States that means a condition in which the technology created by a company or institution does not merely remain in the company or the institution, giving rise to the advantages for companies or other institutions (in Barcelona, 2009).

Kenji Moriyama. 2010, spillovers may also be in the form of a deluge of capital from a country or region are advanced to the territory of

flourished. Likewise, kris can cause plenty of against developing countries through (I) the fall of export demand for goods and services, (Ii) a decrease in remittances inflows, and (iii) sudden incoming capital flows (foreign direct). Portfolio inflows, investments, and bank loans).

Effect of the overflow of technology can also be the availability of human resources is high, such as regarding the level of education, level of skill, experience and work ethic. It can also be either a large number of findings of technology production machinery, technology or communication success stories which later became the inspiration for the company or other institutions to emulate it or wear it.

The effect of industrial spills (industry spillovers) means a company; in General, is a big company, which was able to become the driving sector either vertically or horizontally to other sectors through input-output linkages, embeddedness competition and a domino effect on related industries vertically or horizontal. Horizontally means in the context of the between sectors in the same region. While horizontally means for the region on it or wider.

The overflow effect of growth (growth spillovers) means the presence of a growth area of creating growth in the surrounding area or vice versa the growth of a region driven by the growth of the surrounding area through relationships economy. It could be the area of natural resources (natural resources) are less abundant, but the area located near other areas which have abundant natural resources, so that the area presents to get the effect of abundance the neighbor, through the relationship of factors of production and input-output linkages between sectors.

Some patterns of the existence of the interregional linkages (linkage interregional) in the field of Economics include: the flow of goods and services, intermediate goods link (intermediate goods) and the end (final goods), the Association of production, consumer shopping patterns (shopping), pattern control and ownership of the economy, income streams including transfers and money transfer (remittance), capital flows, financial systems either formal or informal, the migration of Labor (employment migration) or seasonally the

development of telecommunications (Bendavid-Val, 1991).

Vivek Arora and Athanasios Vamvakidis. 2010 that the effect of the overflow (Svilofer effect) trade China with other countries such as Indonesia bring shocks from growth in China relative to other external variables from the shake-up. The impact of China's growth seems to transmitted via the trade route

III. Research approach

Approach this research using quantitative and qualitative Descriptive, using ratio analysis in discussing the phenomenon faced by each region in the area of research. The approach is intended to measure the ratio of growth and a shift in the economic sector that occurred in each region. It also is intended to measure the reach of plenty of economic growth against the center rear area (Nodal and Hinterland).

Location Research

This research will be conducted in South Sulawesi at the Kabupaten/Kota, namely: Makassar city Gowa Regency Maros Regency Takalar Regency. Site selection based on the consideration that the region is a region that is closest to the center of Marketing.

Population and the Sampling Technique

The population of this research is all over the County and the city in South Sulawesi, during the sample Mamminasata Area, including the city of Makassar, district of Maros Regency Gowa (Sunggu Minas), and Regency Takalar. Teknin sampling used is non-probability sampling with purposive sampling technique, because given the existing growth Center South at Sulawesi exists on urban areas, so that done by selecting a location or area of development. The data used in this research is secondary data 2011-2013 Year that includes GDP, economic growth, population, the distance of the region.

Method of Data collection data collection done by way of collecting information from a source of information that is considered valid and is a reliable source either government agencies or private entities that associated with the data associated with the This research. Data collection methods used are documentation: namely, do the data collection that is already documented by institutions associated with this research.

Analisis Data

Analysis Of The Effect Of The Overflow

1 Effect of the overflow of special

To calculate the effects of spills of regional growth in the use of the overflow Effect of spatial analysis (SPrt) as follows (Capello, 2007):

$$SP_{rt} = \sum_{j=1}^n w_j \frac{\Delta Y_{jt}}{d_{rj}}$$

where;

ΔY_{jt} = Revenue growth area j (regional neighboring) in year t.

j = all of the neighboring areas of the r

the d_{rj} = distance between the r and j

n = number of neighbouring areas

w = weight of economically the region against region it j.

2. Analysis of the changing workforce

Analysis of the model used in this study at the start by identifying the pole – pole of growth of the whole district/town in South Sulawesi with the approach of the changes of the structure of the Workforce (Kuehn and Bender, 1990)

Through changes in the structure of the workforce at the smallest geographic area

(county) can be in the identification potential growth poles. It assumed that the composition of the workforce is an indication of the development of an area. To calculate the size of the components of the competitive sector I and County or city (county) j can be calculated with the following equation:

$$C_{ij} = E'_{ij} - [(E'_{ip} / E_{ip}) E_{ij}]$$

where E' : is a labor in the period then

E : Labor is the current period.

I_p : is a labor of national/provincial.

$\sum_i C_{ij}$: is a component of the overall competitive for each county or city j

IV. Research result

The Analysis of The Linkages Between the Regional Economy (Gravity) In the Area of Mamminasata

1.The Effect of The Overflow Area Economic Growth Mamminasata

The overflow effect is the effect of the growth that occurs in the area surrounding area against the growth of the kuub (hinterland). The impact of the growth effect may be positive (favorable effect) can also be negative (unfavorable effect). The impact can affect per-capita income and structure economic a neighboring area. Effect of the existence of inequality can found in abundance in the area around as a result of proximity and access from urban center to the surrounding area (hinterland). The difference in the ease of access and distance from the center of growth to the area around influential in will be different in each of those areas. In addition to differences over flow, growth is also heavily

influenced by the amount of area that neighbors the recipient area of the overflow effects. The fact that data can see in table 1 shows that the nearer hinterland area towards the center of growth, the higher the effect spills an acceptable economic

growth, it also influenced by the number of neighboring areas, a growing number of regions neighboring the greater the effect of the overflow can obtain of the area due to the economic interaction between the surrounding area

Table 1 effect of plenty of growth in the area of Mamminasata
The year 2008-2013

No	Regency/Towns	The Number of Neighboring Areas	The Overflow Effect (spillover effect)
1	Gowa	8	8,689810
2	Maros	5	4,050057
3	Takalar	3	2,344019
4	Makassar	3	1,073081

Source: Sports Results Data of South Sulawesi BPS Year 2015

Gowa is the area closest to the center of economic growth, i.e. Makassar city and the neighboring area has 8 affects far greater abundance than with the Takalar Regency Maros Regency and city of Makassar. The height of the overflow effect at Gowa as a result due to the proximity of the regions and the economic activities of the community so that nearly all sectors of the economy that are in the city of Makassar as the Centre of growth coupled with sector field businesses that are in the Gowa Regency Gowa, easy community to work in the city of Makassar was also one of the dominant elements influencing the effects of wealth, compared to other areas of with.

2. The location of the Pole – Pole of growth District/City in South Sulawesi

The development of labor in South Sulawesi, many experiences a change of structures in 10 years last, i.e. the year 2004 – 2013. Previously a lot of workforce in the sector of agriculture, forestry and fisheries, plantation sector, particularly the to a variety of switching sector services viable rising very rapidly.

Sector plantation agriculture, forestry, and fisheries in 2004 as many as 1,573,761 workers dropped to 1,428,151 workers. While the sector –

other sectors continue to experience increased. Sectors of the processing industry of the year 2004 as much as 142,141 workers, 196,332 workers being in the year 2013. Large, retail trade, restaurants, and hotels of the year 2004 amounting 486,463 years 2013 rose to 603,804. The service sector of the community, the social and personal year 2004 amounting to 298,186 up to 598,995 workers in the year 2013. And sectors – sectors such as mining and multiplication, electricity, gas and water transport, warehousing and communications, finance, Insurance, business buildings, land and rentals services companies also experienced a rise from the year 2004 amounting 389,855 workers be 463,998 workers in the year 2013.

Through changes in the structure of the workforce can identify potential growth pole-pole. It assumed that the composition of the workforce is one indication of the development of an area. In table 5 can be seen District/City whichever be the pole – pole of growth in South Sulawesi.

From Table 2 that there are nine the pole – pole of growth in South Sulawesi. Area – the area is the town of Makassar with a value competitor 86,779, Regency North luwu with value competitor 75,667, Regency. Tana Toraja 39,077

competitor value, Regency. Barru competitor
15,367 value

Table 2

The change of labor Structure Years 2004 – 2013

District/City	Agriculture, forestry, Hunting Fishing	Processing Industry	Large, retail trade, restaurants, Hotel	Community, social services, and individuals	Other	Value Of Competitor
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Takalar*	9,764	8,075	4,814	-2,146	-12,468	8,038
Gowa	-57,026	-10,190	57	869	12,179	-54,111
Maros	15,665	-6,197	-6,159	-3,307	-2,608	-2,605
Makassar*	4,643	64,799	20,927	-3,383	-205	86,779

*) is the growth of the polar regions

Source: prepared from South Sulawesi Province BPS data (2015)

Takalar Regency value 8,038 competitors, Makassar city as the capital of the province, became the pole of growth which has the highest competitor components, i.e. 86.779. With excellence – excellence in various fields and donate the GDP of South Sulawesi, the highest IE of 33.18 percent of the total GDP of South Sulawesi in the year 2013.

Other Cities and counties that became the pole of growth is a district and a city with a range of advantages in the form of development of the agricultural sector, and its fishery sector, sector efforts that encourage UMMK become grow and develop so that the impact on the growth of the region. In this study, a new the growth of the became the Centre of Takalar in Mamminasata Area. In this case, the effect closely related to the growth of wealth and plenty of economic and agglomeration formed in the area. Agglomeration economies can arise for several reasons. Some types of agglomeration mechanism of action according to its causes can be classified into three channels the famous so-called "Three Marshallian Channels", namely: the merger or

unification of the labour market (labor market pooling), shared usage input (input sharing) and the effects of overflow of technology (knowledge spillovers), the Trio creates economies of scale both externally and internally as possible (Cohen and Paul, 2008:4).

The process of the formation of agglomeration characterized by structural change labor changes the composition of the workforce. Structural changes of the economy of South Sulawesi evaluated between 2004 and 2013.

V. Conclusion

Based on the results of the research of and discussion in this study, it can be deduced some things as follows:

1. The overflow effect of economic growth and development gravity from the center of the growth and development of different impact member at each region Hinterland Town Makassar. The closer the area to City Makassar as a growth Centre, the number of neighboring regions, the greater the overflow and gravity

happened, so too does a region far from Makassar city as a center of growth, then the plenty of economic growth and development of the gravity become increasingly small.

2. Obstacles faced by regions in developing regions has still limited the availability of adequate infrastructure to manage potential areas so that economic growth and development would be slow, there's even a growing region depressed so are unable to obtain an adequate economic growth as expected by each region.
3. To encourage the acceleration of economic growth and development on daerah Hinterlang city of Makassar, then development strategy does is build relatively flimsy synergy between the area in advance of his country, doing the construction of the policy integrated nature of inter and inter region. Creating new growth centers for a certain area to encourage growth in areas that are very far from the center of major economies growth in this city of Makassar.

VI. Suggestions

Based on the research results and conclusions of this research, so some things can recommend as follows:

1. To create the effect of a deluge of economic growth and gravity high and equitable development for the whole region of Hinterlang in South Sulawesi, it needs to be created new growth centers in a region to encourage neighboring areas in increase economic activity and the development of a. Because neighboring areas nearby can quickly provide plenty of economic and gravity development with neighbouring regions.
2. To reduce development barriers faced by each region for lack of infra-structure, then local governments are expected to team up with other regions or neighbouring areas nearby to synergized in development. Also, local governments should seek as strong as possible to encourage the provision of the infrastructure of its territory by fundamental needs.
3. To accelerate the rate of development of the region's hinterland, then Government creates a

development strategy by the conditions of the respective regions. Do regional cooperation among to synergize in the advance area respectively.

References

- [1] Adisasmita, R., 2005. *Dasar-dasar Ekonomi Wilayah*. Yogyakarta: Graha Ilmu.
- [2] Darmayanto, Arief dan Hafizrianda. 2010. *Model-Model Kuantitatif Untuk Perencanaan Pembangunan Ekonomi Daerah. Konsep dan Aplikasi*. Penerbit PT. IPB Pres.
- [3] Yarman Gulo. 2015. Identifikasi Pusat –Pusat Pertumbuhan dan Wilayah Pendukung Dalam Pengembangan Wilayah Kabupaten Nias . *Widyariset*, Volume 18, Nomor 1, April 2015 37–48.
- [4] I Wayan Suparta. 2009. Spillover Effect Perekonomian Propinsi DKI Jakarta dan Sumatra Selatan Terhadap Pertumbuhan Ekonomi Propinsi Lampung. *Jurnal Ekonomi Pembangunan Vol. 10, No.1, Juni 2009, hal. 32 – 48*
- [5] Jayadinata, J.T., 2000. *Pembangunan Desa Dalam Perencanaan*. Bandung: ITB.
- [6] Jhingan, M.L., 2007. *Ekonomi Pembangunan dan Perencanaan*. Jakarta: Raja Grafindo Persada.
- [7] Kenji Moriyama. 2010. The Spillover Effects of the Global Crisis on Economic Activity in MENA Emerging Market Countries—An Analysis Using the Financial Stress Index. International Monetary Fund WP/10/8
- [8] Kuncoro, M., 2002. Evaluasi Penetapan Kawasan Andalan: Studi empiris di Kalimantan selatan 1993-1999, *Jurnal Ekonomi dan Bisnis Indonesia, Vol. 17, No.1, 2002*.
- [9] Kuncoro, M., 2003. *Ekonomi Pembangunan, Teori, Masalah dan Kebijakan*. Yogyakarta: UPP AMP YKPN.
- [10] Kuncoro, M., 2012. *Perencanaan Daerah, Bagaimana Membangun Ekonomi Lokal, Kota dan Kawasan*. Jakarta: Salemba

- [11] Tarigan, R., 2007.*Ekonomi Regional, Teori dan Aplikasi*. Edisi Revisi. Jakarta: Bumi Aksara.
- [12] Vivek Arora and Athanasios Vamvakidis. 2010. China's Economic Growth International Spillovers. International Monetary Fund WP/10/165